

1. (Previously presented) A liquid crystal display, comprising:
  - a plurality of converters that convert a luminance signal and two color-difference signals of an input video signal into digital signals, each digital signal corresponding to one of the luminance and color-difference signals;
  - a plurality of setting circuits that set magnitudes of reference voltage ranges to determine upper limit voltages and lower limit voltages of the digital signals to be identical in each of the converters, each setting circuit including:
    - a variable power supply connected to one of the converters, the variable power supply to determine the upper limit voltage that defines a maximum value of the input signal to said one of the converters corresponding to a maximum value of the digital signal outputted from said one of the converters, the variable power supply to permit a contrast adjustment of picture images, and
    - a second power supply connected to said one of the converters, the second power supply to determine the lower limit voltage that defines a minimum value of the input signal to said one of the converters corresponding to a minimum value of the digital signal outputted from said one of the converters;
  - and
  - a plurality of intermediate voltage circuits that set intermediate voltages between the upper limit voltages and the lower limit voltages, the intermediate voltage circuits to input the intermediate voltages into the converters corresponding to said two color-difference signals.
2. (Cancelled)
3. (Previously presented) A liquid crystal display according to claim 1, wherein each second power supply is a fixed power supply.
4. (Previously presented) A liquid crystal display according to claim 1, each intermediate voltage circuit comprising:
  - a first resistor having a first end and a second end, the first end of the first resistor connected between the variable power supply and a respective converter of one of the two-color difference signals; and

a second resistor having a first end and a second end, the first end of the second resistor connected between the second power supply and the converter of each of the two-color difference signals, and the second end of the first resistor and the second end of the second resistor connected to the respective converter.

5. (Previously presented) A liquid crystal display according to claim 1, wherein one of said two color-difference signals is acquired by subtracting the luminance signal from a red signal and the other of said two color-difference signals acquired by subtracting the luminance signal from a blue signal.

6. (Previously presented) A liquid crystal display, comprising:  
a plurality of converters that convert a luminance signal and two color-difference signals of an input video signal into digital signals, each digital signal corresponding to one of the luminance and color-difference signals;

a setting circuit that sets magnitudes of reference voltage ranges to determine upper limit voltages and lower limit voltages of the digital signals to be identical in each of the converters, the setting circuit including:

a common variable power supply connected to the converters, the variable power supply to determine the upper limit voltage that defines a maximum value of the input signal to said one of the converters corresponding to a maximum value of the digital signal outputted from the converters, the variable power supply to permit a contrast adjustment of picture images, and

a common second power supply connected to said converters, the second power supply to determine the lower limit voltage that defines a minimum value of the input signal to said converters corresponding to a minimum value of the digital signal outputted from said converters; and

an intermediate voltage circuit that sets intermediate voltages between the upper limit voltages and the lower limit voltages, the intermediate voltage circuits to input the intermediate voltages into the converters corresponding to said two color-difference signals.

7. (Previously presented) A liquid crystal display according to claim 6, the intermediate voltage circuit comprising:

a first common resistor having a first end and a second end, the first end of the first resistor commonly connected to a midpoint of a path connecting the common variable power supply and the converter of each of the two-color difference signals; and

a second common resistor having a first end and a second end, the first end of the second common resistor connected to a midpoint of a path connecting the second common power supply and the converter of each of the two-color difference signals, and the second end of the first resistor and the second end of the second resistor connected to the respective converter.

8. (Previously presented) A liquid crystal display according to claim 6, wherein the second power supply is a fixed power supply.

9. (Previously presented) A liquid crystal display according to claim 6, wherein one of said two color-difference signals is acquired by subtracting the luminance signal from a red signal and the other of said two color-difference signals acquired by subtracting the luminance signal from a blue signal.

10. (New) A liquid crystal display according to claim 1, wherein the intermediate voltage values correspond to a white level and a black level in each of the two color difference signals.

11. (New) A liquid crystal display according to claim 6, wherein the intermediate voltage values correspond to a white level and a black level in each of the two color difference signals.